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## What is claimed is:

1. A system to capture one or more images of a semiconductor chamber, comprising:

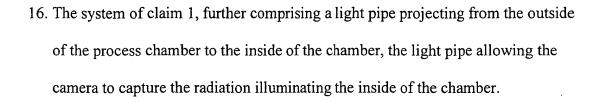
a radiation source to generate radiation to illuminate the chamber; and a camera coupled to the process chamber and adapted to receive the radiation reflected from the chamber.

- 2. The system of claim 1, wherein the radiation source comprises one or more lamps.
- 3. The system of claim 1, further comprising a processor coupled to the camera.
- 4. The system of claim 3, further comprising a data storage device coupled to the processor and the camera to store images from the camera.
- 5. The system of claim 3, further comprising a network adapter card coupled to the processor.
- 6. The system of claim 5, wherein the network adapter card is coupled to a wide area network.
  - 7. The system of claim 5, wherein the network adapter card is coupled to the Internet.

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- 8. The system of claim 7, further comprising a server coupled to the Internet and adapted to receive data from the camera.
- 5 9. The system of claim 1, wherein the server stores multimedia data from the camera and sends the multimedia data to a remote viewer on demand.
  - 10. The system of claim 1, wherein the camera captures a still image or a video.
- 10 11. The system of claim 9, wherein the still image or video is captured based on one or more trigger conditions.
  - 12. The system of claim 1, further comprising a process sensor coupled to the processor to capture process data in addition to camera data.
  - 13. The system of claim 1, further comprising a motor coupled to the camera to pan the camera.
  - 14. The system of claim 1, further comprising a view port coupled to the chamber.
  - 15. The system of claim 14, further comprising a light pipe coupling the camera to the view port.

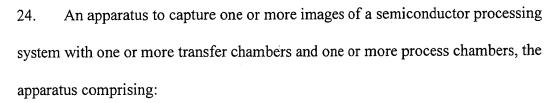
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- 5 17. The system of claim 1, wherein the camera captures radiation illuminating outside the chamber.
  - 18. The system of claim 1, wherein the radiation source is ambient radiation.
- 19. The system of claim 1, wherein the radiation source is an infrared light source coupled to the chamber.
  - 20. The system of claim 1, wherein the radiation source is a visible light source coupled to the chamber.
  - 21. The system of claim 1, further comprising an imaging processor coupled to the camera to detect one or more predefined criteria.
  - 22. The system of claim 21, wherein the imaging processor determines the position of one or more components in the chamber.
  - 23. The system of claim 22, wherein the components include a wafer, a robot arm, a wafer cassette, a wafer support, or a chuck.

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a radiation source to generate radiation to illuminate the semiconductor processing system; and

a camera coupled to the semiconductor processing system and adapted to receive the radiation reflected from the semiconductor processing system.

10 25. A system to capture one or more images of a chamber, comprising:

a radiation source to generate radiation to illuminate the chamber; and a camera coupled to the process chamber and adapted to receive the radiation reflected from the chamber;

a processor coupled to the camera;

a data storage device coupled to the processor and the camera to store images from the camera;

a network adapter card coupled to the processor and the Internet;

a server coupled to the Internet and adapted to receive and store data from the camera, the server sending the multimedia data to a remote viewer on the Internet.

26. A method for viewing semiconductor processing operation, comprising: illuminating a chamber with radiation; and





## capturing one or more views of the chamber using a camera.

27. The method of claim 26, further comprising analyzing the views to locate the position of one or more components in the chamber.

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- 28. The method of claim 27, wherein the components include a wafer, a robot arm, a wafer cassette, a wafer support, or a chuck.
- 29. The method of claim 26, further comprising storing the views on a remote server.

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- 30. The method of claim 29, further comprising streaming the views from the remote server to one or more remote viewers.
- 31. The method of claim 26, wherein the views are captured based on the occurrence of one or more predetermined criteria.
  - 32. The method of claim 31, wherein the criteria include a component movement, a component failure, an out-of-range condition, or predefined time interval.
- 20 33. A method for remote viewing semiconductor processing operation, comprising: illuminating a chamber with radiation; capturing one or more views of the chamber using a camera; storing the views on a remote server; and



streaming the views from the remote server to one or more remote viewers, wherein the views are captured based on the occurrence of one or more predetermined criteria.